

Installation guide

# Filter drier, shell

## Type DCR and DCR E



023R9504

023R9504

**Refrigerants:**

**DCR Standard (A1, Group 2)**

R22, R23, R113, R125, R134a, R404A, R407A, R407C, R407F, R410A, R438A, R448A, R449A, R449B, R450A, R452A, R507A, R513A, R1233zd, R1234ze, etc.

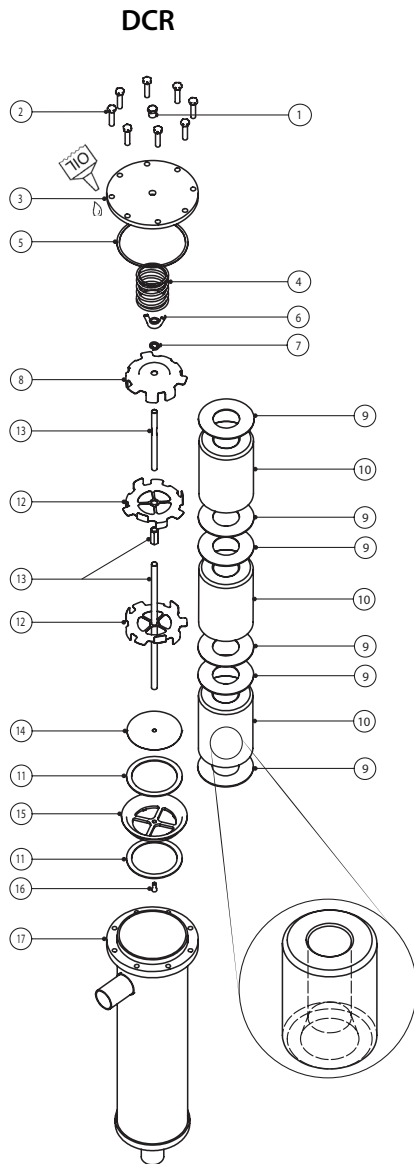
**DCR E Flammables (A2L, Group 1)**

R32, R444A, R444B, R445A, R446A, R447A, R451A, R452B, R454B, R455A, R1234yf, etc.

For other refrigerants, please contact Danfoss representative.

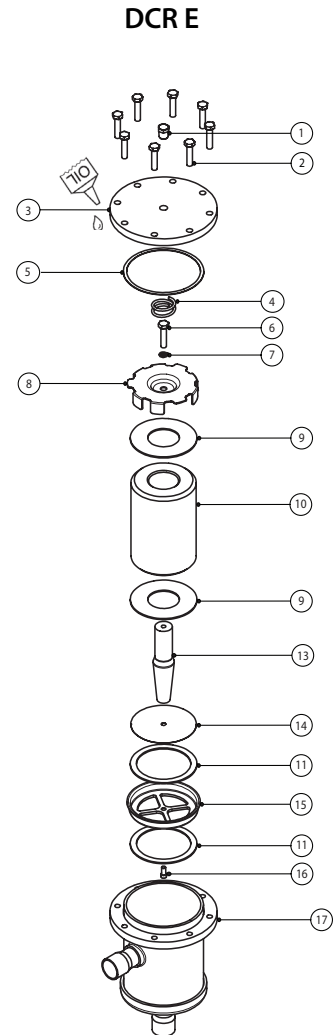
**Media Temperature:** -40 - 70 °C / -40 - 160 °F

**Design**



| Pos. | Description                  |
|------|------------------------------|
| 1    | Plug for cover               |
| 2    | Bolts for cover              |
| 3    | Top cover                    |
| 4    | Spring                       |
| 5    | Top cover gasket             |
| 6    | Wing nut (DCR) / Bolt (DCRE) |
| 7    | Lock washer                  |
| 8    | Top plate                    |
| 9    | Core felt gasket             |
| 10   | Solid core                   |
| 11   | Core holder felt gasket      |
| 12   | Core plate                   |
| 13   | Distance rod                 |
| 14   | Wire Mesh                    |
| 15   | Core holder                  |
| 16   | Hex Socket Head Screw        |
| 17   | Shell                        |

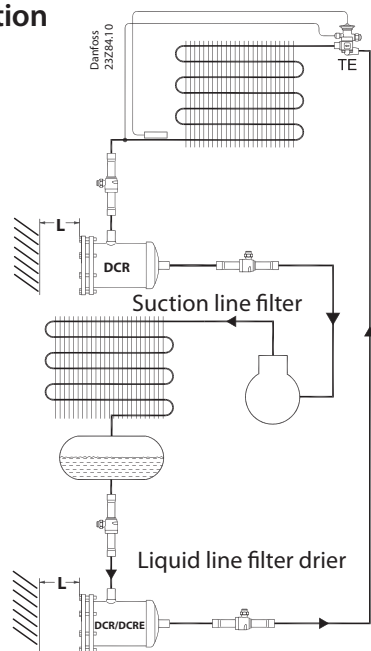
Inner taper of core always facing towards filter outlet. This apply for DCR and DCRE components.



Імпортер: ТОВ з іі "Данфосс ТОВ" 04080, Київ 80, п/с 168, Україна

Info for UK customers only: Danfoss Ltd., 22 Wycombe End, HP9 1NB, GB

## Installation



| Type     | L minimum |      | Maximum working pressure<br>PS / MWP [bar] / [psig] |
|----------|-----------|------|-----------------------------------------------------|
|          | [mm]      | [in] |                                                     |
| DCR 048  | 170       | 7    | 46 / 667                                            |
| DCR 096  | 310       | 13   | 46 / 667                                            |
| DCR 144  | 310       | 13   | 35 / 507 <sup>1)</sup>                              |
|          |           |      | 46 / 667 <sup>2)</sup>                              |
| DCR 192  | 310       | 13   | 28 / 406 <sup>1)</sup>                              |
|          |           |      | 40 / 580 <sup>2)</sup>                              |
| DCRE 048 | 170       | 7    | 50 / 725                                            |

<sup>1)</sup> For usage with strainer or as a receiver application

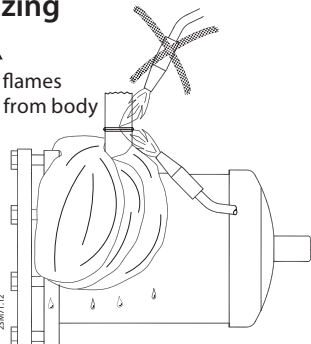
<sup>2)</sup> For "drier" application using all the permissible cores

**!** "The DCRE can only be used for A2L when the solid core is placed. DCRE is not allowed to be used as receiver."

## Brazing

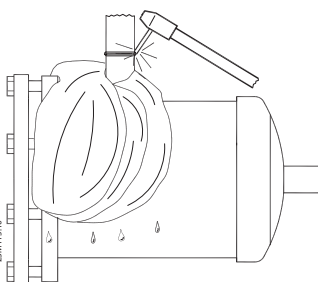


Keep flames away from body



| Connector type | Brazing material               |
|----------------|--------------------------------|
| Copper         | Min. 5 % Ag                    |
| Steel          | Silver-flo 55 + Easy-flow flux |

## Welding



Customer best practice will still be needed:

- Use wet wrap when installing.
- Braze the joints.
- Let them cool down.
- Clean the brazing /welding area after the installation (remove remaining flux with a brush).
- This is an important operation and needs to be done with great care to remove all remaining flux.
- Paint / Anti-corrosive needs to cover all open steel parts, areas where the black original paint has been burnt due to brazing and at least 3 cm approx of the copper.
- Paint the joints twice.

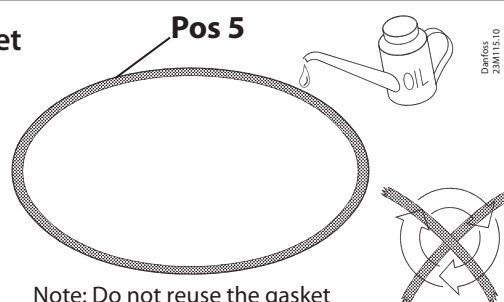


Do not install DCR / DCRE insert before soldering

Note: Confirm correct top cover gasket is selected for DCR or DCRE

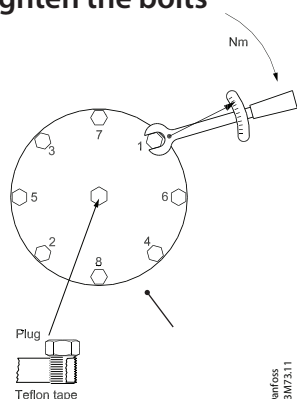
## Gasket

Pos 5



Note: Do not reuse the gasket

## How to tighten the bolts



| DCRE - Bolts M10 x 1.5 |                         |
|------------------------|-------------------------|
| Step 1                 | Fingertighten all bolts |
| Step 2                 | 5 Nm / 3.69 ft lb       |
| Step 3                 | 20 Nm / 14.75 ft lb     |
| Step 4                 | 35 Nm / 25.81 ft lb     |
| Step 5*                | 50 Nm / 36.88 ft lb     |

| DCR - Bolts M8 x 1.25 |                         |
|-----------------------|-------------------------|
| Step 1                | Fingertighten all bolts |
| Step 2                | 3 Nm / 2.21 ft lb       |
| Step 3                | 10 Nm / 7.37 ft lb      |
| Step 4                | 20 Nm / 14.75 ft lb     |
| Step 5*               | 28 Nm / 20.65 ft lb     |

\* Repeat until complete tightness has been reached.